

REMARKS

Claims 1-21 are currently pending in the subject application and are presently under consideration.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

I. Rejection of Claims 1-9 and 16-20 Under 35 U.S.C. §103(a)

Claims 1-9 and 16-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Chen, *et al.* (US 5,812,780) in view of Bernardin, *et al.* (US 2003/0191795). It is requested that this rejection be withdrawn for at least the following reasons. Chen, *et al.* and Bernardin, *et al.*, when taken alone or in combination, fail to teach or suggest all elements recited in the subject claims.

[T]he prior art reference (or references when combined) must teach or suggest all claim limitations. *See* MPEP §706.02(j). *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The subject matter claimed herein relates to loading a test server with simulated user interaction to determine one or more metrics regarding performance of the server. According to one example, different user profiles or characteristics can be utilized in the same tests to better simulate actual user use. To this end, claim 1 recites *dynamically adjusting at least one characteristic of at least one of the simulated users based at least in part on a browser type related to the simulated user, for distribution thereof as a percentage of total requests sent to a server being load tested*. Independent claim 16 recites similar aspects, namely *dynamically adjusting the user characteristics based on one or more browser types during the testing of the server*. Chen, *et al.* and Bernardin, *et al.*, when taken alone or in combination, fail to teach or suggest this aspect.

Chen *et al.* relates to a system for the provision of realistic load conditions on a server application by simulating the behavior of multiple users operating client software. As the Examiner clearly acknowledges, however, Chen *et al.* does not disclose *dynamically adjusting at least one characteristic of at least one of the simulated users based at least in part on a browser type related to the simulated user*, or any behavior regarding a browser type as recited in the

subject claims. (See Final Office Action dated February 25, 2008). The Examiner offers Bernardin, *et al.* to cure this deficiency; however, Bernardin, *et al.* is similarly lacking.

Bernardin, *et al.* relates to a system for scheduling tasks in a parallel architecture wherein an application program interface can be provided to facilitate remote operation with the architecture. The task scheduling can be automated based on priority of jobs, for example, and task results can be sent to the requestor of the task. Additionally, Bernardin, *et al.* describes an API for the system that allows for creating an interface that can be utilized by a web browser. However, Bernardin, *et al.* fails to disclose or suggest determining characteristics or any characteristics comprising a **browser type** of a simulated user, much less dynamically adjusting such characteristics as recited in the subject claims.

In fact, Bernardin, *et al.* is completely silent regarding such aspects. In the sections cited by the Examiner in support, Bernardin, *et al.* discloses functionality of a Broker, which receives task requests and handles scheduling thereof; namely, the section discloses determining “at least one, two, three, four, or more of the following attributes of the available processing resource: (i) operating system of the processing resource; (ii) available memory of the processing resource; (iii) available disk space of the processing resource; (iv) security features of the processing resource; (v) speed of the processing resource; (vi) availability of locally-cached data at the processing resource; (vii) typical frequency of local user activity at the processing resource; and (viii) time of most recent local user activity at the processing resource.” (See paragraph [0075]).

Additionally, other sections cited by the Examiner discuss resolving scheduling problems, caching, data set utilization, interactive modeling/data visualization, and an administrative interface accessible by compatible browser. (See paragraphs [0287], [0326], [0352], and [0361]). Nowhere does Bernardin, *et al.* contemplate adjusting simulated user characteristics based on a **browser type** or characteristics comprising a **browser type** of a simulated user as recited in the subject claims. As far as allowing accessibility to an API from different compatible browsers as disclosed by Bernardin, *et al.*, this is not indicative of performing any action (such as dynamically adjusting characteristics) or differentiating based on a type of browser as recited in the subject claims, much less even taking such into consideration. For example, before an action can be performed based on a **browser type**, the browser type must be acquired; both references are silent in regard to this aspect. Thus, Bernardin, *et al.* does not

differentiate between browser types and cannot be said to teach aspects regarding determination of a browser type.

Furthermore, claim 5 recites *the characteristic statistically determined based on web log records*. Though Chen, *et al.* discloses utilizing a log file, the log file is used to report statistics of the load testing services. Conversely, claim 5 recites characteristics statistically determined from the log, meaning that not only is the log used post-creation, but it is utilized to determine characteristics based on the contents. For example, simulated users can be based in part on users discerned from the log file. Chen, *et al.* discloses creating the log file. Thus, the references fail to teach or suggest this additional aspect.

Moreover, the Examiner asserts that combining Chen, *et al.* and Bernardin, *et al.* would “allow an administrator to monitor and manage the server with increasing secured network, and increased convenience to authorized users from any compatible browser.” (See Final Office Action dated February 25, 2008). Assuming *arguendo* that the combination teaches such aspects, this is not what the applicants are claiming. The claims recite dynamically adjusting simulated user characteristics based on a **browser type** of a simulated user, not an administrator monitoring and managing a server *via* a compatible browser. In applicants’ claims, the browser type is causing the dynamic adjustment of user characteristics; in Bernardin, *et al.*, however (and the combination with Chen, *et al.*), the browser type is not even considered.

In addition, as Bernardin, *et al.* teaches an API for managing a system, combining Chen, *et al.* and Bernardin, *et al.* would merely produce a web-accessible API for a load server testing application. This combination does not teach or suggest adjusting user characteristics, or anything, based on a browser type as recited in the subject claims.

In view of at least the foregoing, it is readily apparent that Chen, *et al.* and Bernardin, *et al.*, when taken alone or in combination, fail to teach or suggest all aspects of claims 1 and 16. Therefore, rejection of these claims, as well as, claims 2-9 and 17-20, which respectively depend therefrom, should be withdrawn.

II. Rejection of Claims 10-15 and 21 Under 35 U.S.C. §103(a)

Claims 10-15 and 21 stand rejected under 35 U.S.C. §103(a) as being anticipated by Malmskog, *et al.* (US 6,721,686) in view of Bernardin *et al.* It is requested that this rejection be

withdrawn for at least the following reasons. Malmskog, *et al.* and Bernardin, *et al.*, when taken alone or in combination, fail to teach or suggest all elements recited in the subject claims.

As described, the subject matter claimed herein relates to loading a test server with simulated user interaction to determine one or more metrics regarding performance of the server. According to one example, different user profiles or characteristics, such as browser type, can be utilized in the same tests to better simulate real world user use. To this end, claim 10 recites a *plurality of simulated users dynamically adjusted based on predetermined weightings of a user profile related to at least one of the simulated users having weighted characteristics that comprises at least a browser type therein*. Claim 21 recites similar aspects, namely *means for dynamically adjusting characteristics of a simulated user while loading the server*. Malmskog, *et al.* and Bernardin, *et al.*, when taken alone or in combination, fail to teach or suggest this aspect.

Malmskog, *et al.* relates to a system for generating a load on a web server and testing the performance thereof. Specifically, a number of synthetic clients can be produced utilizing various communication metrics, bandwidth, packet loss rate, delay, *etc.* As the Examiner clearly acknowledges, however, Malmskog *et al.* does not disclose *weighted characteristics comprising at least a browser type* as recited in the subject claims. (See Final Office Action dated February 25, 2008). The Examiner offers Bernardin, *et al.* to cure this deficiency; however, Bernardin, *et al.* is similarly lacking as described previously.

In particular, Bernardin, *et al.* does not contemplate simulated user characteristics comprising a *browser type* or utilizing such as recited in the subject claims. As far as allowing accessibility from a compatible browser, as recited in the sections cited by the Examiner, this is not indicative a browser type characteristic of a simulated user that can be used to adjust the simulated user as claimed. Though Bernardin, *et al.* may be operable with multiple compatible browsers, this does not indicate that a browser type is utilized as a characteristic in any way (*e.g.*, that the browser type is determined and used as a simulated user characteristic, much less a weighted one) as in the subject claims.

Furthermore, combining Malmskog, *et al.* and Bernardin, *et al.*, if the references are even combinable, produces a web accessible API for the test load system of Malmskog, *et al.* However, the browser type utilized to access the API has no relevance to the system other than compatibility from the accessing user's standpoint.

In view of at least the foregoing, it is readily apparent that Malmskog, *et al.* and Bernardin, *et al.*, when taken alone or in combination, fail to teach or suggest all aspects of claims 10 and 21. Therefore, rejection of these claims, as well as, claims 11-15, which depend therefrom, should be withdrawn.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP637US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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